## WHAT IS CLAIMED IS:

- 1. A magnetic recording medium, comprising:
- a non-magnetic substrate,
- a non-magnetic layer disposed on the non-magnetic substrate, and

a magnetic layer disposed on the non-magnetic substrate via the non-magnetic layer containing at least carbon black and a radiation curing type binder,

wherein the radiation curing type binder contains a radiation curing type polyurethane resin having both a basic polar group and a sulfur-containing polar group in a molecule.

- A magnetic recording medium according to Claim 1, wherein the basic polar group is an amino group.
- 3. A magnetic recording medium according to Claim 1, wherein the sulfur-containing polar group is a sulfonic metal basic group.
- 4. A magnetic recording medium according to Claim 1, wherein the radiation curing type polyurethane resin has a glass transition temperature of -20°C to 80°C.

5. A magnetic recording medium according to Claim 1, wherein the radiation curing type polyurethane resin has a number average molecular weight of 5000 to 100000.